

## CLAIMS

We claim:

1. A method for browsing a plurality of data objects displayed within a three-dimensional graphical environment comprising:

providing a plurality of selectable data object arrangement schemes;

arranging corresponding images representing the data objects within the environment dependent on a selected one of the schemes.

2. The method as described in Claim 1 further comprising selecting the data object arrangement scheme through a user interface.

3. The method as described in Claim 2 wherein providing arrangement schemes further comprising providing arrangement schemes related to data object metadata.

4. The method as described in Claim 1 wherein providing arrangement schemes further comprising providing arrangement schemes related to data object metadata.

5. The method as described in Claim 3 wherein providing arrangement schemes further comprising providing arrangement schemes related to data object metadata.

6. The method as described in Claim 1 wherein arranging representative images further comprising partitioning the three-dimensional graphical environment into three-dimensional areas and displaying related groups of representative images within the areas, wherein representative images are related dependent on the selected scheme.

7. The method as described in Claim 5 wherein arranging representative images further comprising partitioning the three-dimensional graphical environment into three-dimensional areas and displaying related groups of representative images within the areas, wherein representative images are related dependent on the selected scheme.

8. The method as described in Claim 1 further comprising rearranging representative images within the environment dependent on a newly selected one of the schemes.
9. The method as described in Claim 6 further comprising rearranging representative images within the environment dependent on a newly selected one of the schemes by repartitioning the three-dimensional graphical environment into three-dimensional areas and redisplaying related groups of representative images within the areas, wherein objects are related dependent on the newly selected scheme.
10. The method as described in Claim 6 further comprising arranging representative images within each area according to an auxiliary data object arrangement scheme.
11. The method as described in Claim 6 further comprising determining size of areas dependent on the number of representative images within each group.
12. An apparatus for browsing a plurality of data objects displayed within a three-dimensional graphical environment comprising:
- a plurality of selectable data object arrangement schemes;
  - a three-dimensional graphics processing unit for generating three-dimensional image data corresponding to the environment and images representing the data objects such that the representative images are arranged within the displayed environment dependent on a selected one of the schemes.
13. The apparatus as described in Claim 12 wherein the graphics processing unit comprises a layout processor including:
- an environment partitioner for generating partition information utilized for causing the displayed environment to be partitioned into three-dimensional areas dependent on related groups of representative images and dependent on a set of environment design rules; and
  - an object placement locator for generating placement information for causing related representative images to be displayed within each area dependent on the selected scheme.

14. The apparatus as described in Claim 13 wherein the layout processor determines size of the areas dependent on the number of data objects within each group.
15. The apparatus as described in Claim 13 wherein the layout processor determines size of the areas dependent on the number of data objects within each group.
- 5 16. The apparatus as described in Claim 13 wherein the graphics processing unit further includes an environment creation processor for generating three-dimensional image data corresponding to the displayed environment dependent on the layout information and dependent on a set of appearance design rules and generating three-dimensional image data corresponding to the representative  
10 images arranged within the three-dimensional image data dependent on the placement information.
17. A method for browsing a plurality of data objects displayed within a three-dimensional graphical environment comprising:
- selecting one of a plurality of selectable data object arrangement schemes;
- 15 grouping data objects according to the selected scheme;
- partitioning the environment into a plurality of areas dependent on the number of objects per grouping; and
- rendering the three-dimensional environment including images representing the data objects grouped within each area dependent on the select scheme.
- 20 18. The method as described in Claim 17 further comprising selecting the data object arrangement scheme through a user interface.
19. The method as described in Claim 17 wherein the arrangement schemes relate to data object metadata.
20. The method as described in Claim 18 wherein the arrangement schemes relate to  
25 data object metadata.